

# R-Rated Fuses

## For Motor Circuit Protection

### Medium Voltage

# JCK, JCK-A, JCK-B, JCH, JCL, JCL-A, JCL-B, JCG, JCR, & JCR-B



- R-Rated medium voltage fuses are back-up current limiting fuses used in conjunction with medium voltage motors and motor controllers.
- The JCK-A, JCL-A, & JCR are supplied with Westinghouse Ampguard Hookeye.
- This single hookeye is on one end of the fuse and aids in the insertion and removal of the fuse.
- Current limiting fuses may be designated as R-Rated if they meet the following requirements:
  1. The fuse will safely interrupt all currents between its minimum and maximum interrupting ratings.
  2. The fuse will melt in a range of 15 to 35 seconds at a value of 100 times the "R" number (ANSI C37.46).
- Bussmann R-Rated current limiting fuses are designed for use with medium voltage starters to provide short-circuit protection for the motor and motor controller.
- These fuses offer a high level of fault current interruption in a self-contained, non-venting package which can be mounted indoors or in an enclosure.
- Open fuse indication on all fuses.

CATALOG SYMBOL: JCK, JCK-A, JCK-B, JCH, JCL, JCL-A,  
JCL-B, JCG, JCR, & JCR-B

R-RATED

MEDIUM VOLTAGE

CURRENT LIMITING

2400V AC — JCK, JCK-A, JCK-B, JCH

4800V AC — JCL, JCL-A, JCL-B, JCG

7200V AC — JCR, JCR-B

MAX. DESIGN VOLTAGE      2540V AC — JCK, JCK-A,  
JCK-B, JCH

5080V AC — JCL, JCL-A  
JCL-B, JCG

8300V AC — JCR, JCR-B

U.L. RECOGNIZED:      2540V AC — JCK, JCK-A  
5080V AC — JCL, JCL-A

U.L. RECOGNIZED (GUIDE #MSSS2, FILE # E96676)

# R-Rated Fuses

## For Motor Circuit Protection

### Medium Voltage

JCK, JCK-A, JCK-B, JCH,  
JCL, JCL-A, JCL-B,  
JCG, JCR, & JCR-B

#### Specifications

| Buss<br>Catalog No.                                                                                                                            | Amperage | Maximum<br>Design Voltage | Dimensions (Inches) |       |      | Construction | Max. Int. Cap. |             | Min. Int. Cap. |
|------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------|---------------------|-------|------|--------------|----------------|-------------|----------------|
|                                                                                                                                                |          |                           | A                   | B     | C    |              | Amps (Asym.)   | Amps (Sym.) | Amps (Sym.)    |
| 2400V; R-Rated; Indoor/Enclosure (See Figure 1)                                                                                                |          |                           |                     |       |      |              |                |             |                |
| JCK-2R                                                                                                                                         | 70 2R    | 2540V                     | 11.24               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 165            |
| JCK-3R                                                                                                                                         | 100 3R   | 2540V                     | 11.24               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 220            |
| JCK-4R                                                                                                                                         | 130 4R   | 2540V                     | 11.24               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 320            |
| JCK-5R                                                                                                                                         | 150 5R   | 2540V                     | 11.24               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 410            |
| JCK-6R                                                                                                                                         | 170 6R   | 2540V                     | 11.24               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 480            |
| JCK-9R                                                                                                                                         | 200 9R   | 2540V                     | 11.24               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 720            |
| JCK-12R                                                                                                                                        | 230 12R  | 2540V                     | 11.24               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 970            |
| JCK-18R                                                                                                                                        | 390 18R  | 2540V                     | 11.24               | 3.0   | 3.0  | Double       | 80,000         | 50,000      | 1,430          |
| JCK-24R                                                                                                                                        | 450 24R  | 2540V                     | 11.24               | 3.0   | 3.0  | Double       | 80,000         | 50,000      | 1,880          |
| 2400V; R-Rated; Indoor/Enclosure; With Westinghouse Ampguard Hookeye (See Figure 1)                                                            |          |                           |                     |       |      |              |                |             |                |
| JCK-A-2R                                                                                                                                       | 70 2R    | 2540V                     | 11.24               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 165            |
| JCK-A-3R                                                                                                                                       | 100 3R   | 2540V                     | 11.24               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 220            |
| JCK-A-4R                                                                                                                                       | 130 4R   | 2540V                     | 11.24               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 320            |
| JCK-A-5R                                                                                                                                       | 150 5R   | 27540V                    | 11.24               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 410            |
| JCK-A-6R                                                                                                                                       | 170 6R   | 2540V                     | 11.24               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 480            |
| JCK-A-9R                                                                                                                                       | 200 9R   | 2540V                     | 11.24               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 720            |
| JCK-A-12R                                                                                                                                      | 230 12R  | 2540V                     | 11.24               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 970            |
| JCK-A-18R                                                                                                                                      | 390 18R  | 2540V                     | 11.24               | 3.0   | 3.0  | Double       | 80,000         | 50,000      | 1,430          |
| JCK-A-24R                                                                                                                                      | 450 24R  | 2540V                     | 11.24               | 3.0   | 3.0  | Double       | 80,000         | 50,000      | 1,880          |
| 2400V; R-Rated; Indoor/Enclosure; Bolt-On (See Figure 2)                                                                                       |          |                           |                     |       |      |              |                |             |                |
| JCK-B-30                                                                                                                                       | 25       | 2540V                     | 14.18               | 12.81 | -    | Single       | 80,000         | 50,000      | 90             |
| JCK-B-2R                                                                                                                                       | 70 2R    | 2540V                     | 14.18               | 12.81 | -    | Single       | 80,000         | 50,000      | 170            |
| JCK-B-3R                                                                                                                                       | 100 3R   | 2540V                     | 14.18               | 12.81 | -    | Single       | 80,000         | 50,000      | 245            |
| JCK-B-4R                                                                                                                                       | 130 4R   | 2540V                     | 14.18               | 12.81 | -    | Single       | 80,000         | 50,000      | 340            |
| JCK-B-5R                                                                                                                                       | 150 5R   | 2540V                     | 14.18               | 12.81 | -    | Single       | 80,000         | 50,000      | 430            |
| JCK-B-6R                                                                                                                                       | 170 6R   | 2540V                     | 14.18               | 12.81 | -    | Single       | 80,000         | 50,000      | 500            |
| JCK-B-9R                                                                                                                                       | 200 9R   | 2540V                     | 14.18               | 12.81 | -    | Single       | 80,000         | 50,000      | 1,000          |
| JCK-B-12R                                                                                                                                      | 230 12R  | 2540V                     | 14.18               | 12.81 | -    | Single       | 80,000         | 50,000      | 1,250          |
| JCK-B-18R                                                                                                                                      | 390 18R  | 2540V                     | 14.18               | 12.81 | 3.56 | Double       | 80,000         | 50,000      | 1,700          |
| JCK-B-24R                                                                                                                                      | 450 24R  | 2540V                     | 14.18               | 12.81 | 3.56 | Double       | 80,000         | 50,000      | 1,210          |
| 2400V; R-Rated; Indoor; Hermetically Sealed, Class 1, Group D, Div. 2, Hazardous Locations; For Use with Ampgard Motor Starters (See Figure 1) |          |                           |                     |       |      |              |                |             |                |
| JCH-30                                                                                                                                         | 25       | 2540V                     | 10.81               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 90             |
| JCH-2R                                                                                                                                         | 70 2R    | 2540V                     | 10.81               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 170            |
| JCH-3R                                                                                                                                         | 100 3R   | 2540V                     | 10.81               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 245            |
| JCH-4R                                                                                                                                         | 130 4R   | 2540V                     | 10.81               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 340            |
| JCH-5R                                                                                                                                         | 150 5R   | 2540V                     | 10.81               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 430            |
| JCH-6R                                                                                                                                         | 170 6R   | 2540V                     | 10.81               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 500            |
| JCH-9R                                                                                                                                         | 200 9R   | 2540V                     | 10.81               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 1,000          |
| JCH-12R                                                                                                                                        | 230 12R  | 2540V                     | 10.81               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 1,250          |
| JCH-18R                                                                                                                                        | 390 18R  | 2540V                     | 10.81               | 3.0   | 3.0  | Double       | 80,000         | 50,000      | 1,700          |
| JCH-24R                                                                                                                                        | 450 24R  | 2540V                     | 10.81               | 3.0   | 3.0  | Double       | 80,000         | 50,000      | 2,100          |
| 4800V; R-Rated; Indoor/Enclosure (See Figure 1)                                                                                                |          |                           |                     |       |      |              |                |             |                |
| JCL-2R                                                                                                                                         | 70 2R    | 5080V                     | 15.76               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 165            |
| JCL-3R                                                                                                                                         | 100 3R   | 5080V                     | 15.76               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 220            |
| JCL-4R                                                                                                                                         | 130 4R   | 5080V                     | 15.76               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 320            |
| JCL-5R                                                                                                                                         | 150 5R   | 5080V                     | 15.76               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 410            |
| JCL-6R                                                                                                                                         | 170 6R   | 5080V                     | 15.76               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 480            |
| JCL-9R                                                                                                                                         | 200 9R   | 5080V                     | 15.76               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 720            |
| JCL-12R                                                                                                                                        | 230 12R  | 5080V                     | 15.76               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 970            |
| JCL-18R                                                                                                                                        | 390 18R  | 5080V                     | 15.76               | 3.0   | 3.0  | Double       | 80,000         | 50,000      | 1,430          |
| JCL-24R                                                                                                                                        | 450 24R  | 5080V                     | 15.76               | 3.0   | 3.0  | Double       | 80,000         | 50,000      | 1,880          |

# R-Rated Fuses

## For Motor Circuit Protection

### Medium Voltage

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JCL, JCL-A, JCL-B,  
JCG, JCR, & JCR-B

#### Specifications

| Buss<br>Catalog No.                                                                                                                            | Amperage | Maximum<br>Design Voltage | Dimensions (Inches) |       |      | Construction | Max. Int. Cap. |             | Min. Int. Cap. |
|------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------|---------------------|-------|------|--------------|----------------|-------------|----------------|
|                                                                                                                                                |          |                           | A                   | B     | C    |              | Amps (Asym.)   | Amps (Sym.) | Amps (Sym.)    |
| 4800V; R-Rated; Indoor/Enclosure; With Westinghouse Ampguard Hookeye (See Figure 1)                                                            |          |                           |                     |       |      |              |                |             |                |
| JCL-A-2R                                                                                                                                       | 70 2R    | 5080V                     | 15.76               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 165            |
| JCL-A-3R                                                                                                                                       | 100 3R   | 5080V                     | 15.76               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 220            |
| JCL-A-4R                                                                                                                                       | 130 4R   | 5080V                     | 15.76               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 320            |
| JCL-A-5R                                                                                                                                       | 150 5R   | 5080V                     | 15.76               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 410            |
| JCL-A-6R                                                                                                                                       | 170 6R   | 5080V                     | 15.76               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 480            |
| JCL-A-9R                                                                                                                                       | 200 9R   | 5080V                     | 15.76               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 720            |
| JCL-A-12R                                                                                                                                      | 230 12R  | 5080V                     | 15.76               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 970            |
| JCL-A-18R                                                                                                                                      | 390 18R  | 5080V                     | 15.76               | 3.0   | 3.0  | Double       | 80,000         | 50,000      | 1,430          |
| JCL-A-24R                                                                                                                                      | 450 24R  | 5080V                     | 15.76               | 3.0   | 3.0  | Double       | 80,000         | 50,000      | 1,880          |
| 4800V; R-Rated; Indoor/Enclosure; Bolt-On (See Figure 2)                                                                                       |          |                           |                     |       |      |              |                |             |                |
| JCL-B-30                                                                                                                                       | 30       | 5080V                     | 19.25               | 17.88 | -    | Single       | 80,000         | 50,000      | 95             |
| JCL-B-2R                                                                                                                                       | 70 2R    | 5080V                     | 19.25               | 17.88 | -    | Single       | 80,000         | 50,000      | 180            |
| JCL-B-3R                                                                                                                                       | 100 3R   | 5080V                     | 19.25               | 17.88 | -    | Single       | 80,000         | 50,000      | 270            |
| JCL-B-4R                                                                                                                                       | 130 4R   | 5080V                     | 19.25               | 17.88 | -    | Single       | 80,000         | 50,000      | 350            |
| JCL-B-5R                                                                                                                                       | 150 5R   | 5080V                     | 19.25               | 17.88 | -    | Single       | 80,000         | 50,000      | 450            |
| JCL-B-6R                                                                                                                                       | 170 6R   | 5080V                     | 19.25               | 17.88 | -    | Single       | 80,000         | 50,000      | 540            |
| JCL-B-9R                                                                                                                                       | 200 9R   | 5080V                     | 19.25               | 17.88 | -    | Single       | 80,000         | 50,000      | 700            |
| JCL-B-12R                                                                                                                                      | 230 12R  | 5080V                     | 19.25               | 17.88 | -    | Single       | 80,000         | 50,000      | 1,000          |
| JCL-B-18R                                                                                                                                      | 390 18R  | 5080V                     | 19.25               | 17.88 | 3.31 | Double       | 80,000         | 50,000      | 1,450          |
| JCL-B-24R                                                                                                                                      | 450 24R  | 5080V                     | 19.25               | 17.88 | 3.31 | Double       | 80,000         | 50,000      | 2,000          |
| 4800V; R-Rated; Indoor; Hermetically Sealed, Class 1, Group D, Div. 2, Hazardous Locations; For Use with Ampgard Motor Starters (See Figure 1) |          |                           |                     |       |      |              |                |             |                |
| JCG-30                                                                                                                                         | 30       | 5080V                     | 15.91               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 95             |
| JCG-2R                                                                                                                                         | 70 2R    | 5080V                     | 15.91               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 180            |
| JCG-3R                                                                                                                                         | 100 3R   | 5080V                     | 15.91               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 270            |
| JCG-4R                                                                                                                                         | 130 4R   | 5080V                     | 15.91               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 350            |
| JCG-5R                                                                                                                                         | 150 5R   | 5080V                     | 15.91               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 450            |
| JCG-6R                                                                                                                                         | 170 6R   | 5080V                     | 15.91               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 540            |
| JCG-9R                                                                                                                                         | 200 9R   | 5080V                     | 15.91               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 700            |
| JCG-12R                                                                                                                                        | 230 12R  | 5080V                     | 15.91               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 1,000          |
| JCG-A-18R                                                                                                                                      | 390 18R  | 5080V                     | 15.91               | 3.0   | 3.0  | Double       | 80,000         | 50,000      | 1,450          |
| JCG-A-24R                                                                                                                                      | 450 24R  | 5080V                     | 15.91               | 3.0   | 3.0  | Double       | 80,000         | 50,000      | 2,000          |
| 7200V; R-Rated; Indoor/Enclosure; With Ampgard Hookeye (See Figure 1)                                                                          |          |                           |                     |       |      |              |                |             |                |
| JCR-2R                                                                                                                                         | 70 2R    | 8300V                     | 15.85               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 160            |
| JCR-3R                                                                                                                                         | 100 3R   | 8300V                     | 15.85               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 250            |
| JCR-4R                                                                                                                                         | 130 4R   | 8300V                     | 15.85               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 325            |
| JCR-5R                                                                                                                                         | 150 5R   | 8300V                     | 15.85               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 390            |
| JCR-6R                                                                                                                                         | 170 6R   | 8300V                     | 15.85               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 500            |
| JCR-9R                                                                                                                                         | 200 9R   | 7200V                     | 15.85               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 750            |
| JCR-12R                                                                                                                                        | 230 12R  | 7200V                     | 15.85               | 3.0   | 3.0  | Single       | 80,000         | 50,000      | 1,000          |
| JCR-18R                                                                                                                                        | 390 18R  | 7200V                     | 15.85               | 3.0   | 3.0  | Double       | 80,000         | 50,000      | 1,450          |
| JCR-24R                                                                                                                                        | 450 24R  | 7200V                     | 15.85               | 3.0   | 3.0  | Double       | 80,000         | 50,000      | 2,500          |
| 7200V; R-Rated; Indoor/Enclosure; Bolt-On (See Figure 2)                                                                                       |          |                           |                     |       |      |              |                |             |                |
| JCR-B-2R                                                                                                                                       | 70 2R    | 8300V                     | 19.25               | 17.88 | -    | Single       | 80,000         | 50,000      | 160            |
| JCR-B-3R                                                                                                                                       | 100 3R   | 8300V                     | 19.25               | 17.88 | -    | Single       | 80,000         | 50,000      | 250            |
| JCR-B-4R                                                                                                                                       | 130 4R   | 8300V                     | 19.25               | 17.88 | -    | Single       | 80,000         | 50,000      | 325            |
| JCR-B-5R                                                                                                                                       | 150 5R   | 8300V                     | 19.25               | 17.88 | -    | Single       | 80,000         | 50,000      | 390            |
| JCR-B-6R                                                                                                                                       | 170 6R   | 8300V                     | 19.25               | 17.88 | -    | Single       | 80,000         | 50,000      | 500            |
| JCR-B-9R                                                                                                                                       | 200 9R   | 7200V                     | 19.25               | 17.88 | -    | Single       | 80,000         | 50,000      | 750            |
| JCR-B-12R                                                                                                                                      | 230 12R  | 7200V                     | 19.25               | 17.88 | -    | Single       | 80,000         | 50,000      | 1,000          |
| JCR-B-18R                                                                                                                                      | 390 18R  | 7200V                     | 19.25               | 17.88 | 3.31 | Double       | 80,000         | 50,000      | 1,450          |
| JCR-B-24R                                                                                                                                      | 450 24R  | 7200V                     | 19.25               | 17.88 | 3.31 | Double       | 80,000         | 50,000      | 2,500          |



# R-Rated Fuses

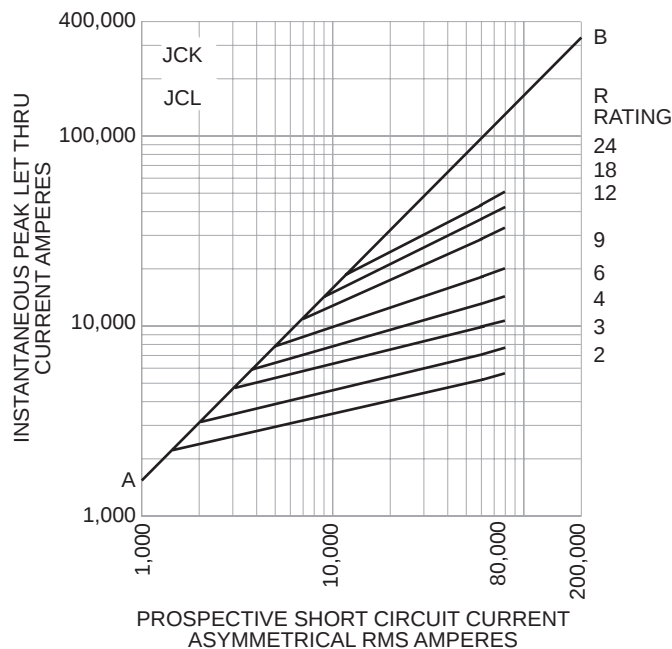
## For Motor Circuit Protection

### Medium Voltage

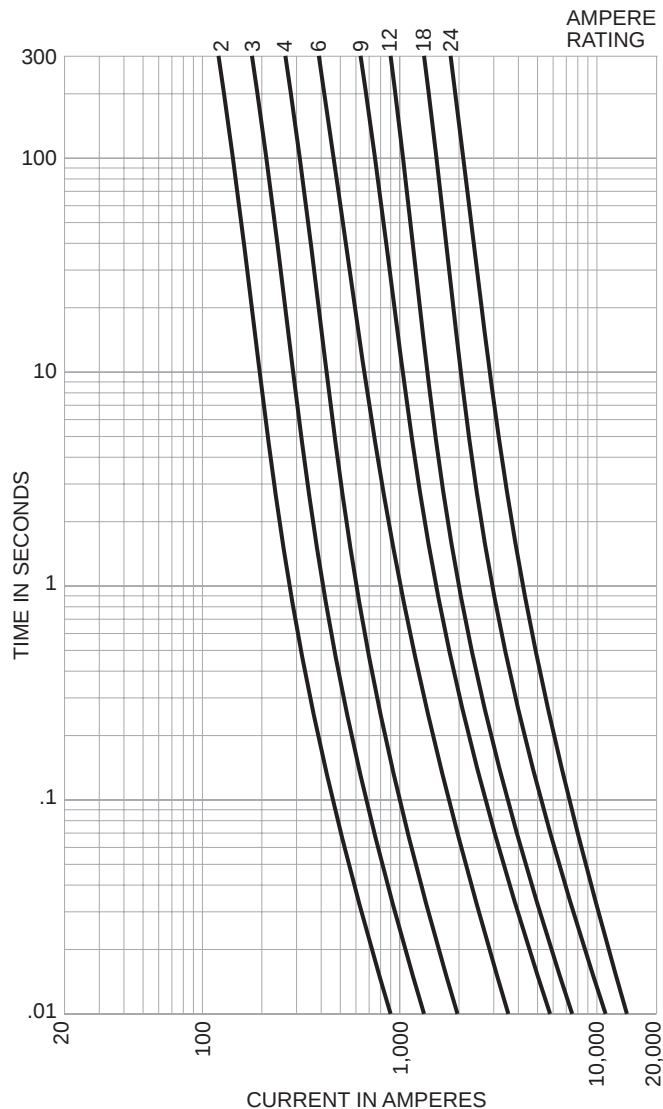
JCK, JCK-A, JCK-B, JCH,  
JCL, JCL-A, JCL-B,  
JCG, JCR, & JCR-B

JCK, JCK-A, JCL, JCL-A

Current Limitation Curves



Time-Current Characteristic Curves—Average Melt



# R-Rated Fuses

## For Motor Circuit Protection

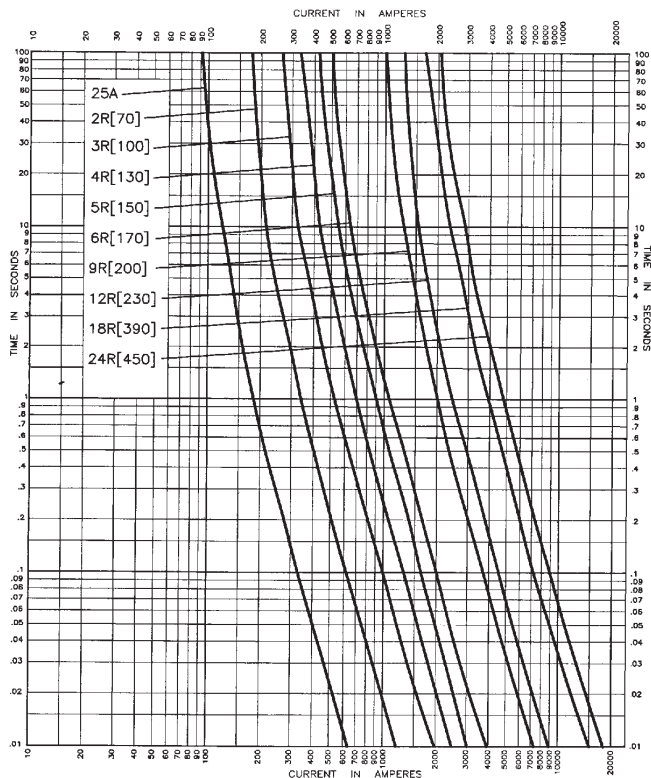
## Medium Voltage

JCK, JCK-A, JCK-B, JCH,  
JCL, JCL-A, JCL-B,  
JCG, JCR, & JCR-B

### JCK-B, JCH

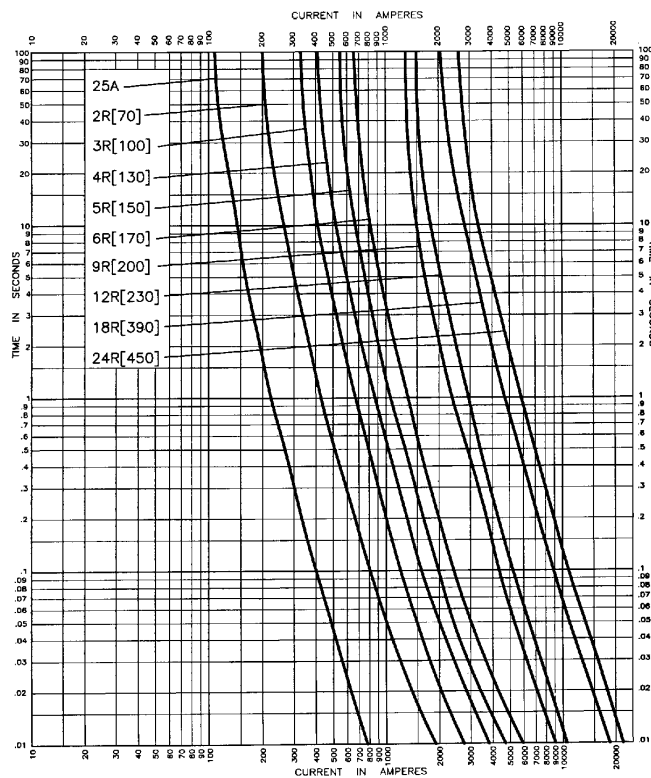
Time-Current Curve: Minimum Melt

50999-1



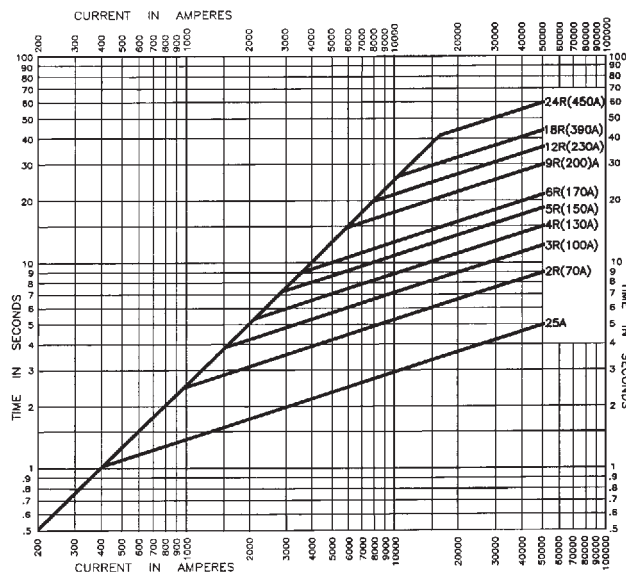
Time-Current Curve: Total Clearing

50999-2



### Peak Let-Through Curves

50999-3



# R-Rated Fuses

## For Motor Circuit Protection

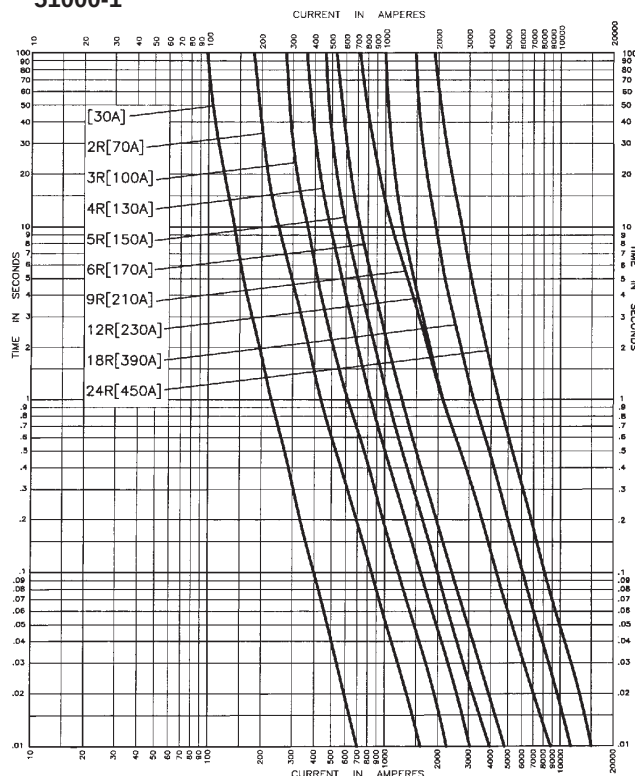
### Medium Voltage

JCK, JCK-A, JCK-B, JCH,  
JCL, JCL-A, JCL-B,  
JCG, JCR, & JCR-B

## JCL-B, JCG

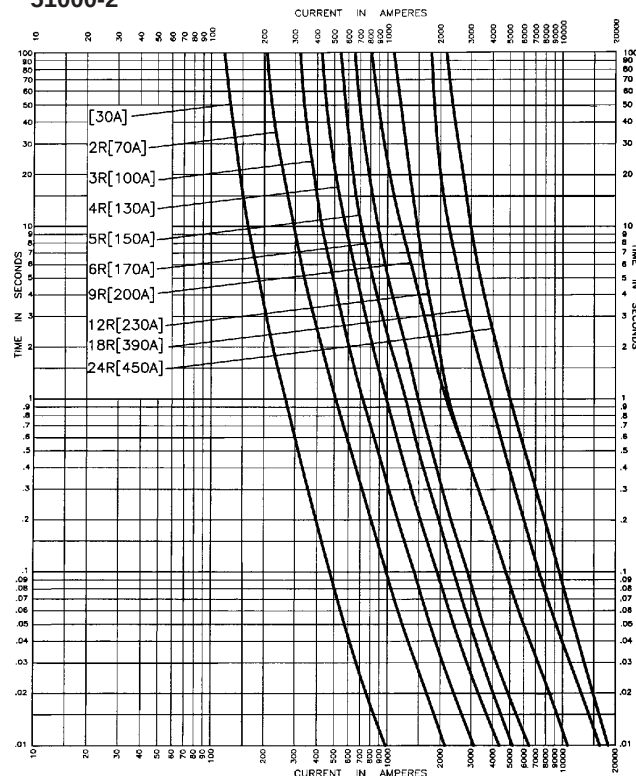
Time-Current Curve: Minimum Melt

51000-1



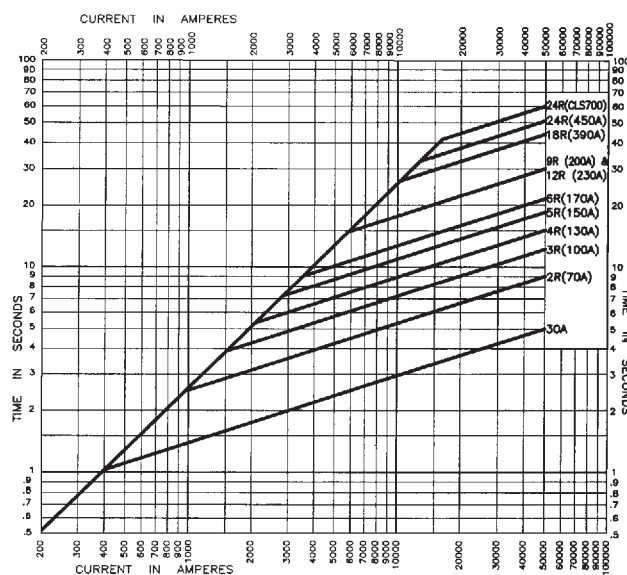
Time-Current Curve: Total Clearing

51000-2



## Peak Let-Through Curves

51000-3



# R-Rated Fuses

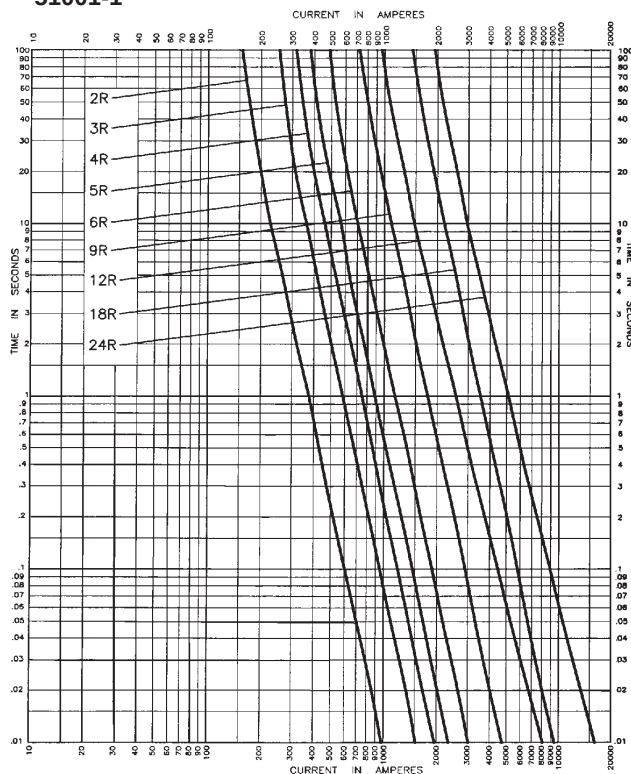
## For Motor Circuit Protection Medium Voltage

JCK, JCK-A, JCK-B, JCH,  
JCL, JCL-A, JCL-B,  
JCG, JCR, & JCR-B

### JCR, JCR-B

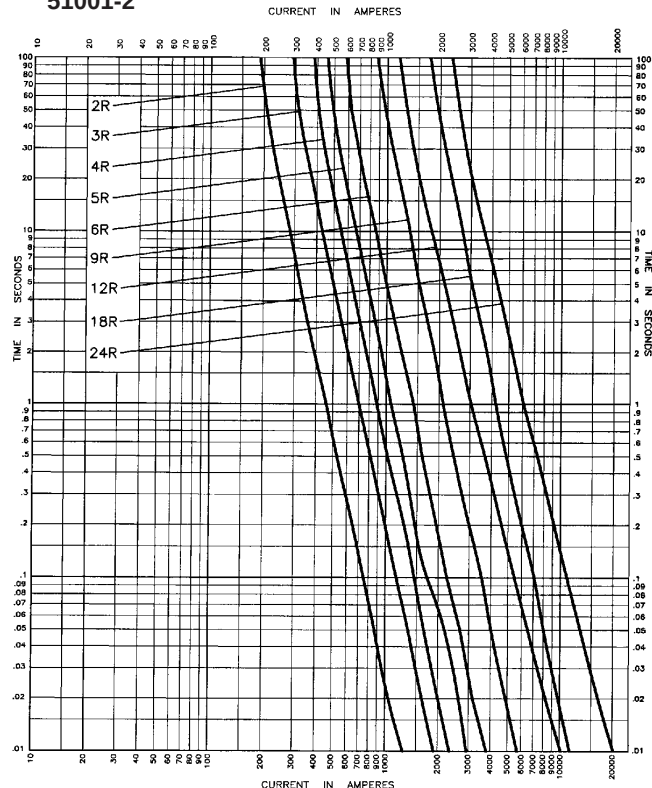
Time-Current Curve: Minimum Melt

51001-1



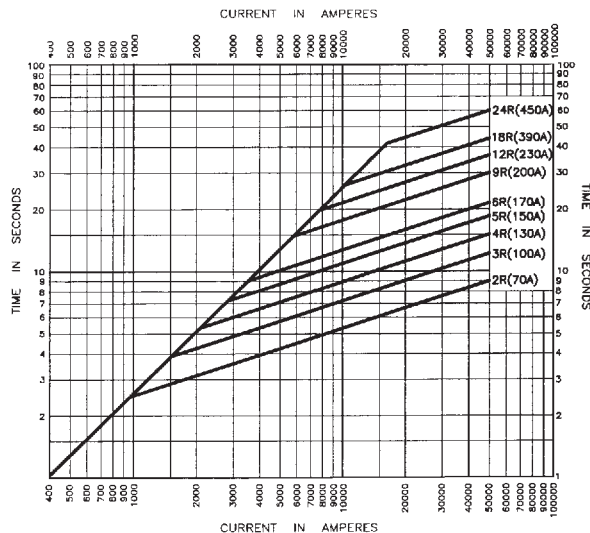
Time-Current Curve: Total Clearing

51001-2



### Peak Let-Through Curves

51001-3



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